Program Activity Report (PAR)

Canine Parvovirus Surveillance

Canine parvovirus is a pathogen that can infect most members of the dog family. The disease likely emerged in domestic dogs in Europe during the 1970s and rapidly spread throughout the world in domestic and wild canids. Scientists at the National Wildlife Research Center revealed that canine parvovirus entered western U.S coyote populations during 1978 and serological data suggested it was enzootic in coyotes by 1980.

Canine parvovirus causes disease by infecting bone marrow, lymph nodes, spleen, and intestines of young animals older than 4 weeks. The most common clinical sign is a pronounced hemorrhagic enteritis (bloody diarrhea). Although transmission through direct contact with infected animals is important, indirect contact with infected environments likely plays a more important role in the transmission and maintenance in a population; canine parvovirus is extremely stabile in the environment.

While veterinary control of canine parvovirus through environmental decontamination and vaccination can be effective for domestic animals and wild canids in captivity, implementation of such protocols in wild populations currently is not practical.

Although documentation of viral shedding has been demonstrated in wild canids, most studies to date have focused on serological surveillance. To gain a better understanding of canine parvovirus in wild coyotes, the NWDP is initiating a collaborative surveillance effort with Cornell University to determine the distribution of CPV by identifying viral particles in tissues and feces.

Over the next few weeks NWDP staff will be developing a surveillance protocol for use by Wildlife Services personnel. We are encouraging states that have access to coyote samples to work with their wildlife disease biologists who can coordinate the sampling effort. For those states that wish to participate, but do not currently have a wildlife disease biologist, we encourage you to work directly with the NWDP office in Fort Collins, CO.

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The original artwork on this page was created by the National Wildlife Disease Program's Erika Kampe and Sarah Goff